STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

In the Matter of:	)	Docket No. 05-AFC-1
Application For Certification For the Pastoria Energy Facility Expansion By Calpine Corporation	)	STAFF'S PREHEARING CONFERENCE STATEMENT

On December 20, 2005, the Pastoria Energy Facility Expansion Application for Certification Committee ("Committee") issued a Notice of Prehearing Conference. In the Notice, the Committee set the date for the Conference as January 17, 2005, and ordered each party planning to participate in the Conference to serve and file a Prehearing Conference Statement by January 10, 2006. Each Statement is to specify the topic areas the party believes are ready for evidentiary hearings and those that are not, any disputed areas and a summary of each, witnesses and their qualifications, a summary of testimony to be offered and the time desired to present direct testimony, time desired for cross-examination, exhibits, and a proposed schedule for the remainder of these proceedings. The notice also orders the parties to address the rationale for identifying the project as a "peaker", provide USEPA comments on the interpollutant offset calculation methodology, include, in condition Soil & Water-6, a requirement for a "Will Serve" letter, and provide any proposed modifications to proposed Conditions of Certification.

Staff is prepared at this time to proceed to evidentiary hearings in all topic areas, except for Transmission System Engineering (TSE). On November 28, 2005, staff issued its Final Staff Assessment (FSA), which constitutes staff's written testimony in these proceedings and includes all of the expected witnesses' qualifications. Staff's testimony for each technical area currently ready for hearing is that, with the Conditions of Certification recommended by staff, the proposed project will have no unmitigated significant adverse impacts.

To complete the TSE analysis, staff is waiting for the Facilities Study being prepared by Southern California Edison (SCE). The applicant was in contact with SCE on January 6, 2006 to

determine the status of the Facilities Study. As of this filing, the technical assessment is now expected January 19, 2006. Staff will review the technical portion of the Facilities Study and begin preparation of a supplement to the FSA, analyzing the environmental and other impacts of the specific measures discussed in the Facilities Study. Staff will file its supplemental TSE testimony within 30 days after the technical assessment is received.

Staff has attached an addendum to the FSA in response to the Committee's questions. Other than a supplement to the TSE section of the FSA, staff does not anticipate filing any further supplemental testimony at this time, but respectfully reserves the right to file such testimony at a later date if warranted. At this time, the FSA and supplemental testimony are the only exhibits staff intends to offer as evidence.

Staff is the only party to this case that has filed formal, written testimony. Thus, at this time, staff is unable to determine with any specificity the length or nature of any cross-examination of witnesses from other parties. In Attachment A, staff has provided a list of all topic areas, the intended witnesses, an estimated time for direct examination, and an estimated time for cross-examination of applicant's witnesses. Without having the benefit of reviewing applicant's testimony, staff is not aware of any technical areas that may be disputed by the applicant. If applicant contests staff's testimony, staff will require more time for cross-examination in those technical areas.

Proposed Schedule

Staff is prepared to proceed with evidentiary hearings in all topic areas, except for TSE. For any undisputed areas, Staff proposes to sponsor testimony into the record by declaration without the presence of witnesses. Staff is available for hearings during late January or February.

DATED: January 10, 2005

Respectfully submitted,

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KERRY A. WILLIS
Senior Staff Counsel

ATTACHMENT A

PASTORIA ENERGY FACILITY EXPANSION

EVIDENTIARY HEARINGS

STAFF'S PROPOSED WITNESS LIST

STAFF'S PROPOSED WINTESS	TOPIC	ESTIMATED TIME FOR DIRECT	ESTIMATED TIME TO CROSS APPLICANT'S WITNESS
Dr. James Reede	Project Description	10 minutes	None
William Walters	Air Quality	15 minutes	20-30 minutes
Susan Sanders	Biological Resources	10 minutes	10 minutes
Dorothy Torres	Cultural Resources	10 minutes	10 minutes
Dr. Alvin Greenberg	Hazardous Materials Mgmt.	10 minutes	10 minutes
Amanda Stennick	Land Use	10 minutes	10 minutes
Steve Baker	Noise	10 minutes	10 minutes
Dr. Alvin Greenberg	Public Health	10 minutes	10 minutes
Dr. Joseph Diamond	Socioeconomic Resources	10 minutes	10 minutes
Linda D. Bond	Soils and Water Resources	10 minutes	10 minutes
David Flores	Traffic and Transportation	10 minutes	10 minutes

Dr. Obed Odoemelam	Transmission Line Safety & Nuisance	10 minutes	10 minutes
James Adams	Visual Resources	10 minutes	10 minutes
Dr. Alvin Greenberg	Waste Management	10 minutes	10 minutes
Dr. Alvin Greenberg	Worker Safety and Fire Protection	10 minutes	10 minutes
Steve Baker	Facility Design	10 minutes	10 minutes
Dr. Dal Hunter	Geology and Paleontology	10 minutes	10 minutes
Steve Baker	Power Plant Efficiency	15 minutes	10 minutes
Steve Baker	Power Plant Reliability	10 minutes	10 minutes
Mark Hesters	Transmission System Engineering	15 minutes	10 minutes
Dr. James Reede	Alternatives	10 minutes	10 minutes
Nancy Tronaas	Compliance Monitoring and Facility Closure	10 minutes	10 minutes

POWER PLANT EFFICIENCY

Supplemental Testimony of Steve Baker and William Walters

INTRODUCTION

In its Notice of Prehearing Conference, the Committee orders that "[t]he parties shall provide the rationale for identifying this project as a 'peaker.'" (p. 4, ¶ 8.b.i) Staff's Final Staff Assessment (FSA) addresses this issue; staff will expand upon this issue herein.

WHY THE PROJECT IS A PEAKER

THE MARKET'S FUNCTION

As explained in the FSA, the project, as a simple cycle gas turbine generator unit, is well suited to providing the services typically expected from a peaker. The project can offer operational flexibility, in the form of short start-up and shutdown times and fast ramping capability, unavailable from less flexible combined cycle plants (FSA, p. 5.3-4, ¶ 3). While the project operates (at full load) at fuel efficiency levels lower than a combined cycle plant at full load, the market for electrical energy will best determine when the project will operate (ibid). Fuel typically accounts for over two-thirds of the total operating costs of a fossil-fired power plant (FSA, p. 5.3-5, last ¶).

High fuel costs provide a powerful incentive to operate a peaker only when the market demands, in the form of sufficiently high power purchase prices. Peakers spend little time actually generating power and earning revenue; see **Table 1** below. In order to motivate energy suppliers to build and operate peakers, grid operators offer premium prices for the services these plants provide. When there is no need for such services, the relative fuel inefficiency of peakers keeps them from competing successfully against more efficient sources of energy.

That the market actually works to limit energy production from these less efficient peaking plants is evident when one examines historical operational profiles of peakers. **Table 1** below lists all the non-cogeneration[1] simple cycle gas turbine peakers in California larger than 40 MW, and displays the capacity factors and equivalent operating hours these plants actually achieved in calendar year 2004:

[1] Cogeneration power plants are typically dispatched to satisfy cogeneration energy needs; the power is sold at whatever price is available. This is exhibited in high capacity factors for cogen plants, commonly ranging from 60 to 100 percent.

Table 1: Capacity Factors of California Peakers Over 40 MW (non-cogen)
Calendar Year 2004

Facility Name	Generating Capacity (MW)	Capacity Factor (%)	Equivalent Hours
Potrero Power	156	3.5	306
Grayson (City of Glendale)	49.3	8.0	697
Harbor (City of Los Angeles)	282	14.5	1266
Oakland Power Plant	223.5	1.1	95
Almond Power Plant (Turlock Irrigation District)	49.5	12.7	1110
Roseville (NCPA)	50.4	0.25	22
Lake (City of Burbank)	70	7.3	636
Pittsburg Power Plant	74	31.9	2794
Vaca Dixon No. 1	49.5	1.1	93
Panoche No. 2	49.5	1.0	90
Border	49.5	2.2	194
El Cajon No. 6	48.7	4.1	360
Enterprise No. 7	49	2.4	207
Indigo Energy Facility	149.7	5.8	505
Larkspur Energy Facility	99.8	4.3	373
Creed Energy Center	47	2.4	214
Lambie Energy Center	47	3.8	331
Goose Haven Energy Center	47	2.6	230
Hanford Energy Park Peaker	92.2	1.2	105
Los Esteros C.E.F.	180	17.1	1498
Henrietta Peaker	98	1.3	112
Gilroy Peaker	135	5.9	521
King City Peaking	47.3	4.9	433
Yuba City Energy Center	47.3	4.3	377
Feather River Energy Center	47	4.0	351
Panoche Peaker	49.9	0.5	41
Gates Peaker	46.5	1.8	155
Tracy Peaker	168.8	0.8	67
Century Generating Facility	44.8	1.2	104
Drews Generating Facility	44.8	1.3	114
Agua Mansa Power Plant	60.5	4.6	401
Riverview Energy Center	47	4.2	365
Springs Generating Station (City of Riverside)	40	0.4	37

Source: EIA Annual Electric Generator Report, 2004

THE NEED FOR PEAKERS

In order to stabilize the electric power grid and serve the load, power must be generated at the moment it is used. While energy storage could aid in satisfying the minute-by-minute fluctuations in power demand, such storage is extremely expensive. The information industry and other computer-intensive businesses invest huge amounts of

capital in emergency power supplies, in the form of batteries, capacitor banks and emergency generators, to ensure uninterrupted power supplies. Other energy users cannot afford such protection; they rely on the grid operators to continually balance the grid, keeping power supply and demand in balance at all times.

Since the grid operators cannot rely on energy storage to maintain the grid in balance, it is essential that they be able to call on generating plants to provide the exact amount of power demanded by the grid at any moment. Some of these plants are dispatched on schedules drawn up hours or days in advance. Some, however, must be available for dispatch on shorter notice. Some plants must be able to come on-line and provide power within minutes. Some must be already on-line, running at partial load, their output actually controlled, up or down, moment-by-moment, by the grid controller's computer; this is called Automatic Generation Control, or AGC. Simple cycle peakers (among fossil-fired power plants) are well suited to this type of service; combined cycle plants are not.

Table 1 above shows that California's large peakers operated at low capacity factors in 2004. Occasionally, however, major disruptions occur, requiring that many megawatts of peaking power be quickly available in order to avoid widespread grid outages. Such disruptions can be costly; a partial statewide outage on August 10, 1996, cost California more than four billion dollars in lost business. (This figure would have been far larger had the outage not occurred on a Saturday.) Having sufficient peaking power available to prevent grid outages is essential.

AIR QUALITY PERMIT

The San Joaquin Valley Air Pollution Control District's New Source Review regulations require that major projects, such as the PEF, provide emission offsets, and that these emission offsets are to be provided based on maximum quarterly emission estimates. For operational flexibility, the applicant did not choose to take operationally constrained maximum daily or quarterly emission limits. This gives the project the flexibility to operate as necessary if there is a required demand over any given period of time in any future year. Normally, it is the summer period, second and third calendar quarters, when demand is highest, when a simple-cycle turbine would be operated during parts of the daytime demand peak. So, while the air quality permit will allow non-peaker type operation, as noted above, operation will be limited based on market factors. Therefore, the emission offset requirements for the project, based on maximum annual operations, should provide substantially more offsets than rules would require based on actual emissions. Therefore, the District's offset procedures, due to the applicant's proposed worst-case permitting request, will result in significantly more actual emission reductions than required by regulation or necessary to meet staff's recommended CEQA mitigation requirement of a 1:1 offset for all non-attainment pollutants and their precursors.

CONCLUSION

The project can be justified as a peaker because such flexible power is essential to keeping the grid in balance, and because the market will prevent the project, and other peakers, from the sort of overutilization that could waste fuel.

AIR QUALITY

Supplemental Testimony of William Walters

INTRODUCTION

In its Notice of Prehearing Conference, the Committee orders that: 1) "Staff shall correct all references to the PDOC in the FSA and review the AQ Conditions to ensure they reflect the FDOC" (p. 4, 8.b.ii); and 2) "Parties shall provide any USEPA comments on the interpollutant offset calculation methodology used for this Project and any revisions necessary in conjunction with the Air District's most recent *Annual Demonstration Report for Equivalency of Offsets*." Staff's Final Assessment (FSA) noted that these two issues needed resolution; staff will provide an update of the resolution of these two issues.

FSA CORRECTION BASED ON FDOC

As noted below, the FDOC is being revised to incorporate a revised interpollutant offset ratio. Staff will provide an addendum to the Air Quality Analysis shortly after the revised FDOC is completed by the Air District.

INTERPOLLUTANT OFFSET CALCULATION METHODOLOGY

As noted in the FSA, USEPA commented that the interpollutant offset calculation should multiply the Distance offset ratio and the interpollutant offset ratio to determine the final interpollutant/distance offset ratio. After consideration of this comment, the applicant and the Air District have determined that they will follow the multiplication method and will require the NOx for PM10 interpollutant/distance offset ratios to effectively increase the ratio from 2.72:1 to 3.33:1 for the NOx ERCs, considering that all emission reductions occur more than 15 miles from the project site.

The FDOC conditions 44 and 45 will be revised to incorporate this change. The applicant should provide the revised offset package to the District during the week of January 9, 2006, and the District should provide the revised FDOC shortly thereafter. Staff will provide an addendum to the FSA Air Quality section that discusses this revision and provides the revised District conditions within a week of receiving the revised FDOC.

Additionally, in the air quality addendum, the verification for staff condition AQ-SC9 (green house gas inventory) will be revised to require reporting on an annual rather than quarterly basis.

USEPA REVIEW OF SJVAPCD'S OFFSET EQUIVALENCY REPORT

USEPA has not completed the review of the offset equivalency report and does not expect to complete the review before the end of February. The equivalency report indicated that the District's New Source Review (NSR) offset program was at least equivalent to Federal NSR offset requirements. Upon review of the report, staff did not find any specific reason to doubt its findings, but did want USEPA to ensure that the methods and procedures were consistent with the District's approved NSR Rule. Staff

will provide additional information regarding this issue and related project impacts to offset equivalency in the Air Quality addendum.

SOIL AND WATER RESOURCES

Supplemental Testimony of Linda D. Bond

REVISED CONDITION OF CERTIFICATION

SOIL&WATER-6: The project owner shall submit "Will Serve" letters from the WRMWSD and KWBA to establish a reliable water supply for this Project. The project owner shall document the Pastoria Energy Facility-Pastoria Energy Facility Expansion (PEF-PEFE) facilities-sharing agreement, which includes water supply, water delivery system, and water processing systems, with the CPM prior to the start of commercial operation.

Verification: The project owner shall submit "Will Serve" letters from the WRMWSD and KWBA to the CPM at least thirty (30) days prior to the start of construction of the PEFE. The project owner shall provide a copy of the PEF-PEFE facilities-sharing agreement, which includes the WRMWSD and KWBA water supply contracts, to the CPM at least thirty (30) days prior to the start of construction of the PEFE. The CPM shall receive copies of any amendments to the facilities-sharing agreement as part of the annual compliance reporting.